





NOTES AND STATISTICS

ON

VACCINATION IN BURMA

FOR THE YEAR 1905-06.



RANGOON:

OFFICE OF THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA.

1906.



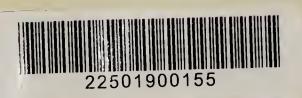


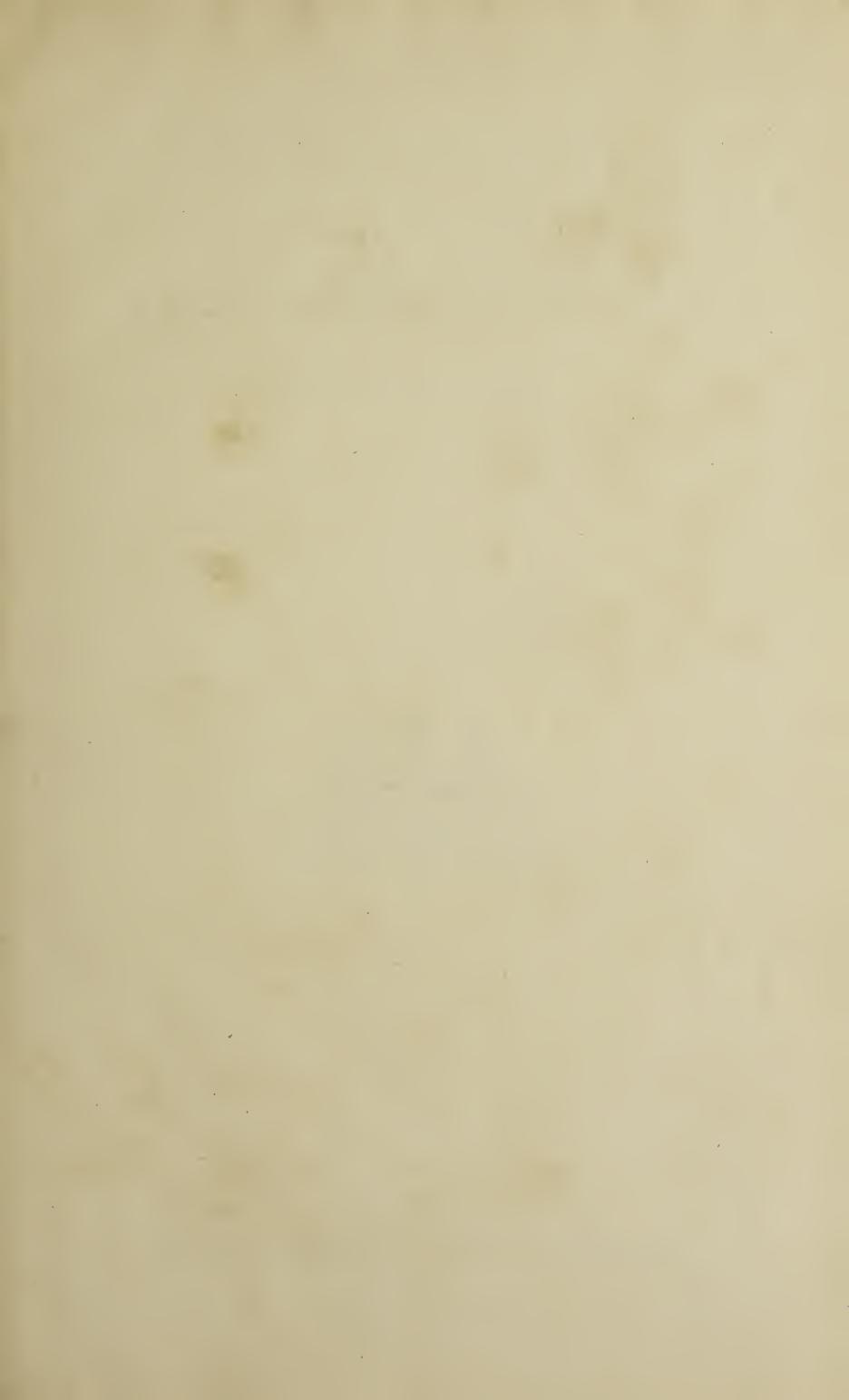
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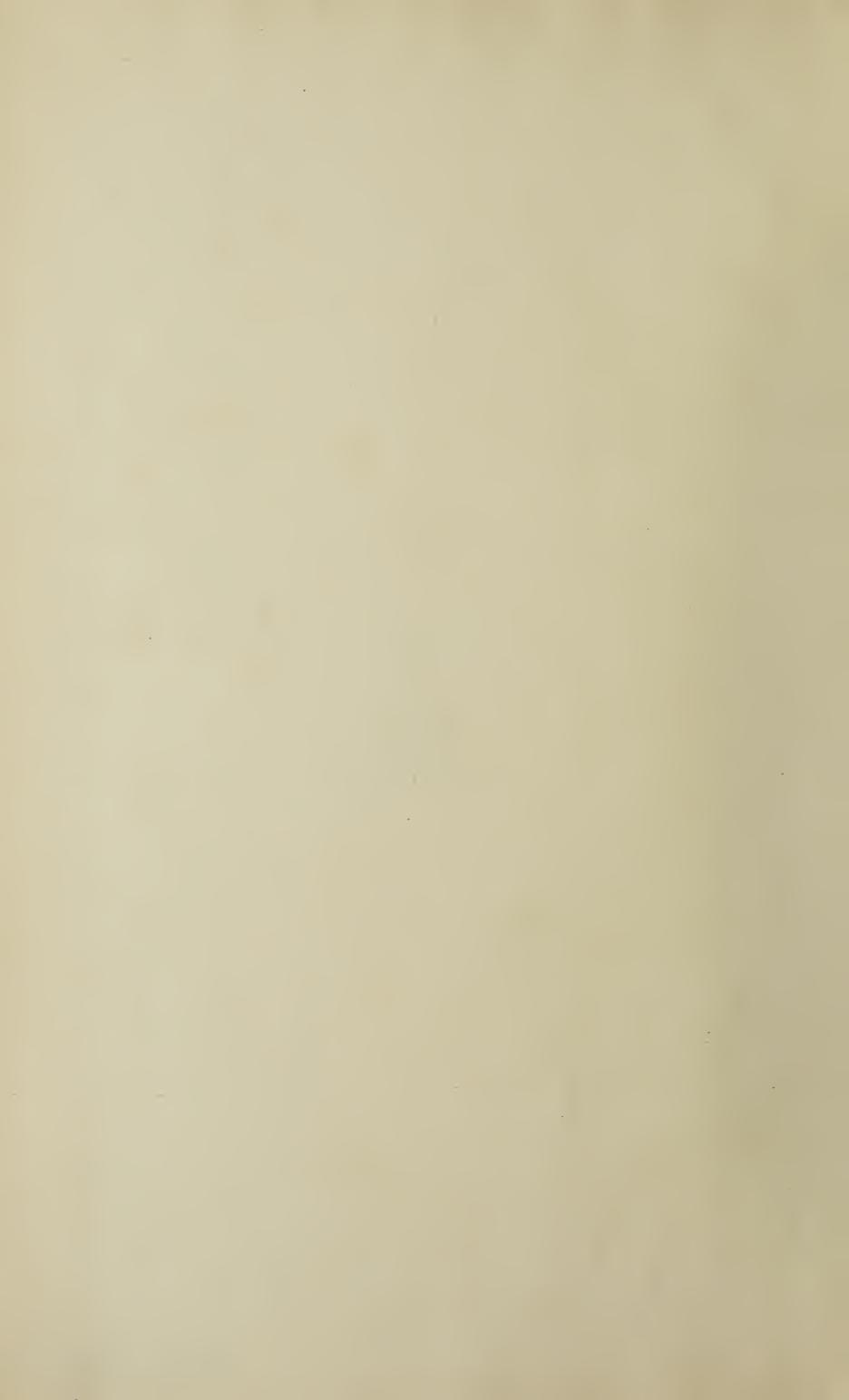
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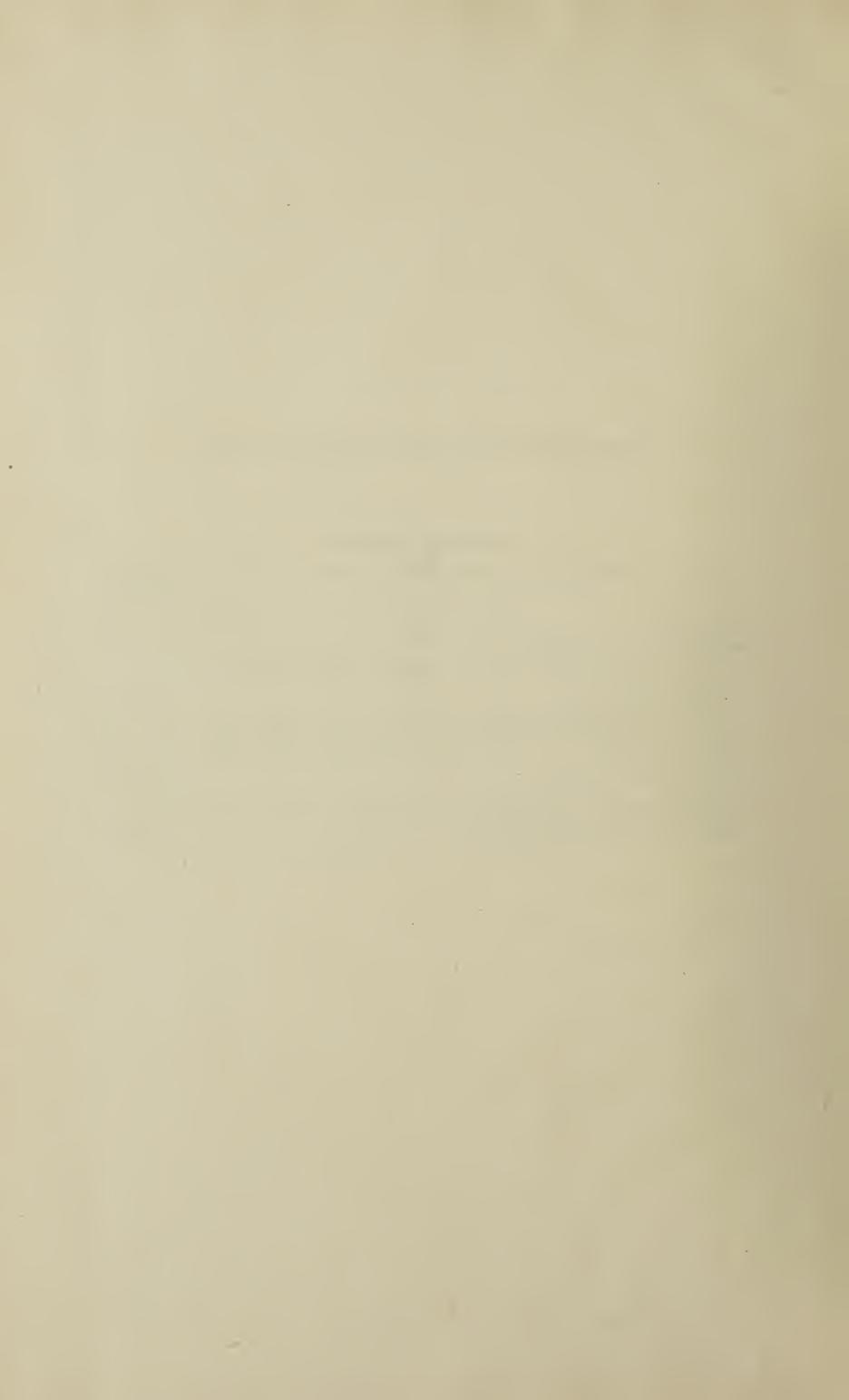
MR. RUDOLF HAUPT, HALLE-A-S.

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NOTES AND STATISTICS

ON

VACCINATION IN BURMA

FOR THE YEAR 1905-06.

The administration of the Vaccination Department during the year was successively in charge of Colonels Little, Macrae and myself. Lieutenant-Colonel Frenchman held charge of office duties for three weeks between the interval of the departure of Colonel Little and arrival of Colonel Macrae.

2. The strength of the establishment was as follows:-

Statement No. II.

Native Superintendents.

Vaccinators.

3. No important change in personnel was made during the year, but as a Akyab. | Toungoo. result of the representative of the represe Bassein. ment accorded sanction for the entertainment of twenty-Hanthawaddy. Amherst. four Native Superintendents and ten probationary Tharrawaddy. Myingyan. vaccinators. Hitherto, in the absence of Native Superintendents of Vaccination, the control of duty by vaccinators except in the Districts noted in the margin, has been solely in the hands of Civil Surgeons. In consequence, much of the time of the vaccinating staff has been spent in journeys from the particular areas in which they have fulfilled work to the headquarters of the Civil Surgeon, to secure instructions as to the next locality to be visited by them. Under this system, particular vaccinators are not responsible for defined areas of the country. The staff now sanctioned by Government will undergo a complete course of training in theoretical and practical vaccination and in allied subjects, at the Meiktila Vaccine Depôt, under Major Entrican. Seeing that this new staff will possess a fair education in English, there is reason to hope that they will acquire such knowledge of the duties they are intended to fulfil as to prevent the occurrence of errors, which must at times be expected with the existing class of men.

4. The following table shows the work fulfilled under various agencies in Statement No. IV.

By Gove Vaccii	ernment nators.		inicipal na to rs.	By Local Vaccin	al Fund		Native ates.	Dispe Vacci	nsary nation.	Army.	
Total.	Success- ful.	Total.	Success- ful,	Total.	Success-ful.	Total.	Success- ful.	Total.	Success- ful.		Suc- cessful.
1	2	3	4	5	6	7	8	9	10	11	12
162,044	144,074	64,883	52,398	181,999	160,428	8,197	6,983	9,812	17,272	370	22 I

5. The total cost of the establishment under all heads amounted to Rs. 114, Statement 464 of which Government bore 37'73 per cent., Municipalities 16'38, Local Funds No. II. 43'18, and Native States 2'71.

Of the total population of the Province, 37.86 per mille were protected during Statements the year. The total average cost for the whole Province per successful case was and IIII four annas nine pies, against five annas two pies of the previous year. The rates varied from fifteen annas eleven pies in the Hill Tracts of Northern Arakan to two annas one pie in Sagaing.

6. The total vaccinations performed were 489,297 against 413,407, or an Statements increase of 75,890. The heaviest increase was in Sagaing (9,343), Amherst Nos. I, III and IV.

(7,954), and Thatôn (6,134). These results reflect creditably upon the Medical Officers concerned, namely, Captain N. P. O'Gorman Lalor, Major Pridmore, Lieutenant-Colonel Evans, and Local Assistant Surgeon Maung Tha Nu.

Strtements Nos. 1 and III.

7. The total average number of cases operated upon by each vaccinator amounted to 1,956, against 1,706 of the preceding year. Medical subordinates in charge of dispensaries contributed 17,507 cases to the total stated.

Statements Nos. I and III.

8. A decrease of 1,707 cases occurred in Upper Chindwin. This may be regarded as sufficiently accounted for by the difficulties met by vaccinators owing to unusual flooding of certain areas. In Prome, an unsatisfactory decrease of 2,054 cases occurred. The Civil Surgeon considers this result as due to the employment of more honest and reliable vaccinators than hitherto. Pending inspection of the area concerned, this statement, which implies a very heavy indictment, may be accepted. In the case of Tavoy, however, a decrease of no less than 8,651 cases cannot be regarded with equanimity. The Civil Surgeon has attempted to account for the results by stating that the population was so fully protected by vaccination as to lead to the serious decrease of cases named. This is certainly untenable, even if the intercensal rate of increase be not taken into account.

Statement I.

9. In the Municipality of Rangoon, the increase of 24,081 cases was largely due to belated vigour in vaccinating, following the severe epidemic of small-pox which prevailed during the year. During this epidemic, there was a total of 3,975 cases with 1,276 deaths. No such heavy incidence of small-pox has occurred in the town of Rangoon since 1883. The popular lay opinion was that this result was brought about by introduction of small-pox into Municipal limits by coolies from India. Major Williams, the Health Officer, however, has secured from the Port Health Officer a statement showing that inspection and segregation of incoming passengers is so efficient as to put this possibility, as an important cause, aside. On the opposite, Major Williams is able to show that the period of the increase of the disease corresponded with the entrance into the town of coolies (who were already in the country) on their return from surrounding districts, where they had been engaged in the paddy harvest.

Rangoon Municipality are certainly defective in respect to staff. For a prolonged period, preserved vaccine has been produced in a local depôt; but the Health Officer shows that he is unable to maintain transmission of vaccine from calf to calf without resorting to the Bangalore Vaccine Institute for fresh stock. I would add that, in my opinion, no other result could possibly be expected from the hands of the most experienced officer, as the whole arrangements as to stabling calves are absolutely bad. Indeed, I have seen vaccine pulp gathered in this depôt that I would elsewhere have refrained from using under any circumstances. I have represented to the Municipality that their depôt does not fulfil modern

requirements without, however, securing any attention to the matter.

Appendix B.

work was evidently careless, as less than half of the available cases of infants were vaccinated.

Statement No. I.

12. The rate of success in the total primary cases in the Province, after omitting unknown results, amounts to 90.80 per cent. In the Rangoon Municipality, although there existed the obvious advantage of little exposure to high temperature of preserved vaccine, beyond that necessary for the few hours during which operations were conducted, the total rate of success, namely, 84.86 per cent. was decidedly poor. This, however, is an improvement upon the preceding year when it was 73.67. In the Hanthawaddy District, the rates of 76.34 per cent. and, in Thatôn, 73.13 per cent. are excessively low. The total variation is between the figure stated for Thatôn and the extraordinary result of 9,620 cases with a success rate of 100 per cent. in the case of Yamèthin. It may be safely said that the latter figure is out of place in an official report. Enquiries will be made as to how this hitherto unexampled result has been arrived at.

Statement No. I.

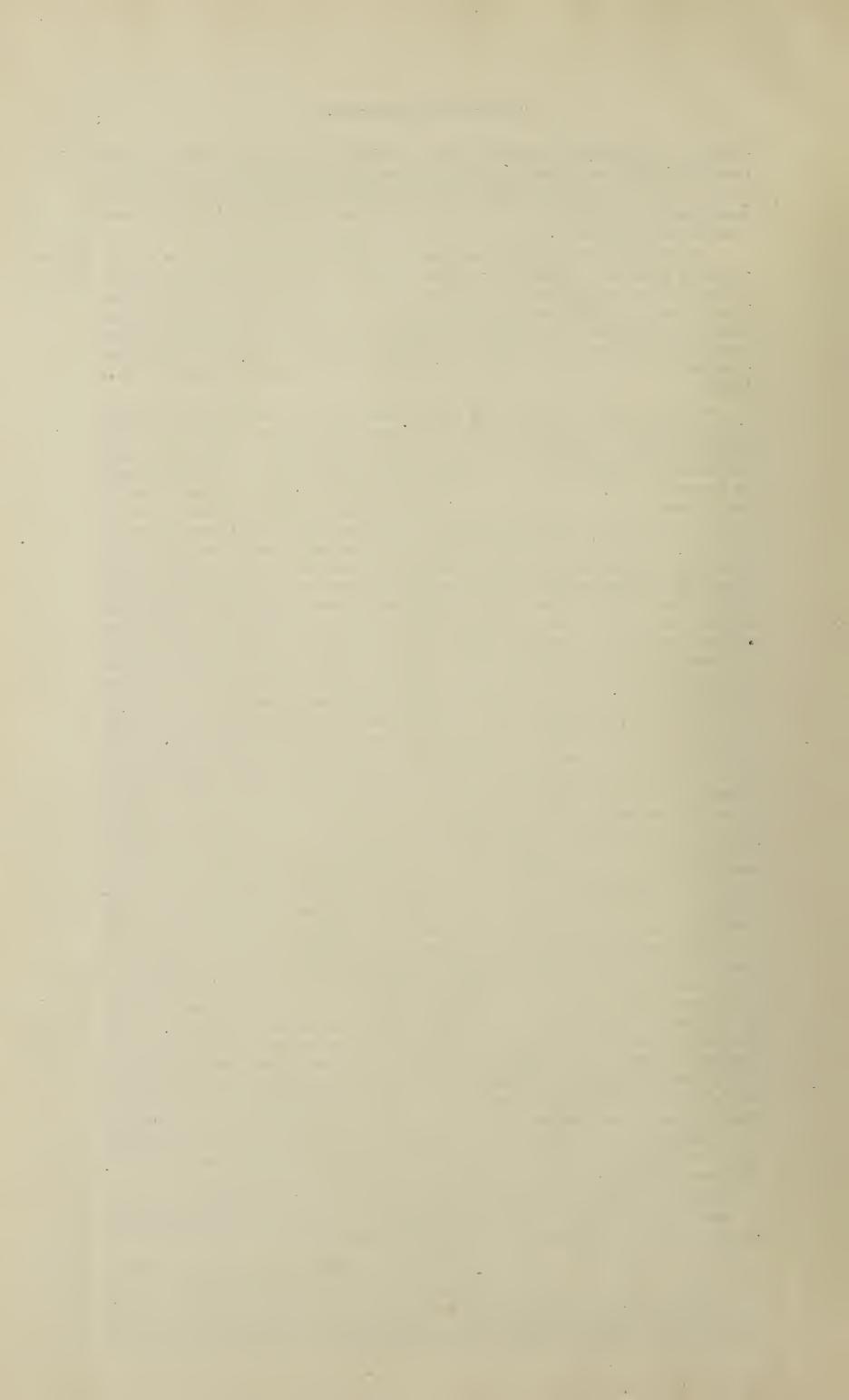
much smaller than is desirable; as both European and recent Indian records point to the necessity of the confirmation of the immunizing influence of infantile vaccination, by a repetition of the operation about the age of puberty. The importance of urging the population to accept re-vaccination, rests in the fact that

whilst an unprotected population suffers chiefly in respect to children, unless revaccination be resorted to in a population protected only by infantile vaccination, adult lives are in danger. Hence, it is a healthy sign that the Municipality of Rangoon is, at the present time, considering the advisability of asking for powers to enforce re-vaccination.

- 14. The success rate of re-vaccination varied from 100 per cent. to 1'92 in Statement a total of 52 cases. As to the first figure, it may be accepted, having regard to the small number (2) treated; but there must be some error in respect to the The whole subject of success rate of re-vaccination depends upon so many factors that it is not desirable that the matter should be expatiated upon; but the chances are, judging from my own work, including vaccinations of persons who have suffered from small-pox and who have been inoculated, that the rate is low.
- 15. The vaccine lymph used was entirely bovine obtained from Meiktila Vaccine Depôt, except in the case of Rangoon which, as already stated, is supplied by its own depôt. All reports go to show that the supply was trustworthy.* As, however, exhibited by the varying rates of success shown in Statement No. I, it is but one stage in progress to place at the disposal of the vaccinator trustworthy material; it still remains for the vaccinator to understand how to use it with full advantage. It need hardly be said that with men of the grade of education now available as vaccinators, all possible results are not secured by them. Irrespective of careless exposure of the material to the sun, there exist varying methods of performing the operation that go towards diminishing the chances of success. Much in this respect can be done by Civil Surgeons training the men to perform the operation on uniformly recognized principles; whilst during the next year, it is hoped to equip each vaccinator with "vaccine carriers" that will protect the vaccine as far as feasible during transport from sun influence, and at the same time provide for the requirements of asepticism. Three forms of vaccine were used, namely, lanoline-vaccine, glycerinized-vaccine, and quinated-vaccine. The latter form was excogitated by Major Entrican. It consists of a proportion of bihydrochloride of quinine in sterile mucilage, stained with cochineal. At the time of his original efforts, Major Entrican was unaware of the fact that this form of quinine had been previously used by Dr. Alan Green in experiments for the killing of extraneous micro-organisms, but the curious choice of media had not been forestalled and these certainly serve their purpose. Quinine was, however, put aside by Dr. Alan Green, in virtue of its effect in gradually modifying the vesicle. That whilst recognizing its influence, however, up to a certain period, this modifying influence may be disregarded and a vaccine less loaded with organisms be produced, is testified to by Major Entrican. In comparing the various vaccines issued he shows, as experience in India already amply testifies, that where duration of vitality is concerned lanoline easily leads as the preferable medium, but he points out that in the unskilful vaccinator's hands the more fluid glycerine forms are more readily manageable. This, of course, is a mere matter of training men to certain procedures. The whole subject, however, is being carefully worked out by Major Entrican, and as he takes a keen interest in the subject of the cultivation and preservation of vaccine, I have no doubt interesting results will be secured. But, in the meantime, his report goes to support the opinion as to the necessity of more uniform methods and more skilled training of vaccinators. An interesting matter in connection with Major Entrican's work in the Vaccine Depôt has been the production by him of two machines for the filling of lanoline-vaccine in tubes, and of glycerinized and quinated lymph in capillary tubes, respectively. He has produced, in both cases, decidedly ingeniously contrived apparatus, which fulfil efficiently in a few minutes work that, under other systems, would demand several hours tedious labour.
- 16. On the subject generally of organization of the Vaccination Department, Government has directed me to furnish a report, and I trust that these and other matters will, during the current year, be fully attended to.

W. G. KING, M.B., D.P.H., Col., I.M.S., Superintendent-General of Vaccination, Burma.

^{*} FOOT-NOTE. -- Although, in contrast with the history of previous years, Major Entrican was able to produce vaccine continuously throughout the hot season at Meiktila, he shows that, as might be expected, climatic conditions handicapped his efforts. On this subject, Government will be specially addressed.



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A.-VACCINATION

STATEMENT No. I.—Showing particulars of Vaccination in the

-			Popula-	Average	Average number of vacc	r i-			Average number of per-		FRIMA	RY VACCI	NATION.	
No	Circles and District	ts.	District according	popula- tion per square	nators employ	Lotali	number o vaccinat	of persons ed.	vacci-			Successfu	?.	
			to census of 1901.	mile,	through out the year.				by each vacci- nator.	Total.	Under one year.	One and under six years.	Total of all ages.	Un- known.
<u> </u>			3	4	5]	6		7	8	9	10	11	12
_	ARAKAN DIVISION.				-	Malcs.	Female	s Total.		1				
1	Akyab		481,666	94	10	6,842	5,880	12,722	1,272	11,918	1,028	5,342	9,170	563
3	Hill Tracts, North Arakan Kyaukpyu	ern	20,682 168,827 95,927	4 38 24	1 6 3	2,701 1,011	141 2,359 965	5,0.0	495 843 660	493 4,9.5 1,675	1 614 160	2,223 645	423 3,884 1,380	19 423
4	Total		762,102	41	20	10,911	9,8,5	20,56	1,013	19,071	2,033	8,290	14,862	1,010
	Pegu Division.		30000											
5 6 7 8	Rangoon Hanthawaddy Pegu Tharrawaddy Prome	•••	252,155 457,537 3 9 572 395 570 355,804	8,996 155 79 1 9	3 6 8 8 12	33,913 5,492 6,376 8,774 9,076	6, 5 37 3,973 6,602 8,478 7,942	45,450 9,465 12,978 17,52 7,0.8	15,150 1,578 1,622 2,157 1,418	15,142 6,670 42,742 17,242 5,605	2,293 519 2, 63 3,683 3,9.6	1,263 2,727 8,1.2 10,595 8,236	7,401 4,851 12,091 15,471 14,114	6,417 276 236 151 831
	Totai		1,820,633	133	37	68,631	33 ,5 32	102,163	2,761	67,401	12,634	30,853	53,931	7,411
	IRRAWADDY DIVISION	٧.												
10 11 12 13 14	Ma-ubin Pyapôn Bas-ein Heazada Myaungmya		283,347 224,939 351,427 484, 53 279,393	173 106 95 169 105	4 5 10 15 7	2,662 2,2,4 11,973 20,712 4,231	2,705 2,32, 10,901 20,221 4,237	5,067 4,601 22, 74 40,956 8,513	1,342 920 2,2 7 2,723 1,-17	4,926 4,1.5 21,980 40,195 7,944	\$50 711 3,8.7 7,538 839	2,3×5 2,829 11, 26 22,1:5 4,959	4,5.8 3,613 20,511 31,876 7,209	11 150 774 44 38
	Total	•••	1,663,669	124	41	41,852	40,414	£2,296	2,607	79,191	13,815	43,494	73,827	1,0.7
	Tenasserim Division	,				•								
15 16 17 18 19	Mergui Toungoo Thaton		300,173 103,979 88,744 279,315 343, 10 37,837	43 21 9 45 63 14	8 5 4 7 6	14,487 2,709 3,106 4,3,0 4.80 641	10,409 2,482 2,953 4,116 5,032 454	21,946 5,191 6,069 8,456 9,353 1,055	3,103 1,035 1,517 1,2 2 1,6 9 1,035	\$15 6,017 8,462 9,89 1,0.6	3,4 5 3 2,355 73+ 3,284 1,784 22	9,425 2 2 .8 2 165 2,922 3,475 195	19,050 4,881 5,003 7,1,0 7,159	240 150 157
2 0	(C-4-1		1,159,553	32	81	30,0 4	25,453	55,520	1,79.	50,860	11,592	20,410	44,040	558
				-						[
21 22 23 24	Bhamo Katha Ruhy Mines		366,507 79,515 176,223 87,694 67,3,9	173 19 55 16 6	10 3 2 3 1	8,573 2,144 1,567 1,368 7,54	7,617 2, 00 1,603 1,366 727	16,190 5,144 3,169 2,784 1,431	1,619 1,715 1,555 911 1,481	14,223 4,395 3,163 2,701 1,481	5,777 1,767 261 863 140	5,509 1 595 1,942 1,243 828	12,730 4,002 3,015 2,4·0 1,32)	15 170 11 2 17
25	m	-	777,338	26	19	15,006	13,712	28,718	1,511	25,966	8,813	11,117	23,556	215
	SAGAING DIVISION.													
26 27 28 29	Shwebo Sagaing Lower Chindwin		286,881 232,653 276,333 151,551	51 152 79 8	8 6 6 6	7,523 10,683 8,790 4,405	8,5 6 11,212 9, 44 4,778	16,349 21,595 18,034 9,183	2,044 3,649 3, 06 1,5 ₅ 1	15,743 19,2 4 17,756 9,133	3,021 8,019 4,747 748	8,093 9,177 9,798 4,525	13,804 17,196 16,210 7,977	661 488 11 256
	Total	7	1,000,483	33	26	31,701	33,760	65,461	2,518	61,916	16,535	31,593	55,187	1,416
30 31 32	Pakôkku Minbu		239,706 \$56,4 9 233,77 245,703	50 57 71 85	8 6 7 7	10,12) 4,636 4,(63 6,630	8,995 4,701 4,570 7,251	19,115 9,337 9,235 13,931	2,389 1,556 .J,319 1,990	16,670 9 173 9,079 13,884	1,905 1,420 1,482 3,705	6,709 5.561 4,886 9,315	13,599 8,060 7,665 13,066	1,764 400 173 105
38		-	1,076,280	63	28	23,102	25,517	51,619	1,841	43,803	8,512	26,471	42,391	2,442
	MEIKTILA DIVISION.												10.55	
31 35 36 37	Yamèthin Kyauksè		252,305 243,197 141,253 353,052	116 57 111 114	5 7 3 7	5,766 5,443 2,802 7,5-2	5,412 5,236 2,976 7,161	11,178 10,734 5,778 14,743	2,236 1,533 1,926 2,106	11,175 10,523 5,587 14,007	1,101 4,56 2,971 2,821	8,769 4,383 1,863 7,305	10,754 9,6±0 4,8±9 11,868	136 703 135 813
		-	992,807	91	22	21,593	20,835	42,4 33	1,9_9	41,092	11,458	22,330	37,031	1,788
38	SHAN STATES. Northern Shan States Southern Shan States		321,(90 816,854	22 19	8 7	3,623 6,330	3,363 6,331	6,9°6 12,711	873 1,816	6,936 1 2,601	212 1,949	3,879 5, 734	6,142 10,476	10 6 157
39	Total	-	,137,444	20	15	10,003	9,691	19,697	1,313	1 9. 5 37	2,161	9,6'3	16,619	233
40	CHIN HILLS.		87,159	1;	2	1,932	1,925	3,237	1,629	3,233	9	4.5	2,300	231
	GRAND TOTAL	10	,477,508	45	241	257,800	213,620	471,420	1,956	417,123	87,563	04,6 06	303,883	16,381,

Note.—Area and population of the *Statistics of Pyapon have

DEPARTMENT.

Province of Burma during the year 1905-06 (Paragraphs 5 to 9 and 12 to 14).

Re	·VACCINATI	on.	PERCENT SUCCESSFUL WHICH THE WERE F	L CASES IN E RESULTS	successfully vacciper 1,000 of popula-	KNOWN C	GE OF UN- CASES TO CASES.	AVERAGE ANNO OF PERSONS SU VACCINATED FREVIOUS FI	CCESSFULLY DURING	AVERAGE AND BER OF DEA SMALL-POX DU VIOUS FIVE	THS FROM
Total.	Success- ful.	Unknown.	Primary.	Re-vacci- nation.	Persons succenated per 1, tion.	Primary.	Re-vacci- nation.	No.	Ratio per 1,00).	No.	Ratio per 1,000.
13	14	15	16	17	18	19	20	21	22	23	24
ξ04	613	***	80·79 90·30	76·24 100·00	20.31	4·77 3·85	50	7,232	15·43 48·64	9	•02
2 75 304	1 44 80	1 6	85·14 82·39	63·77 26·32	23·27 16·06	8.49	8	6,069 2,422	36·16 27·39	15 13	··· •15
1,135	738	7	82.2)	62.65	:0.47	5.30	•59	16,670	22.40	37	•05
£0,308 2,795 2,6 10 1,413	10,062 651 191 6 450	12,143 174 93	84.86 76.34 96.68 90.52 92.41	55·41 24·34 80·93 60·00 34·69	69·27 11·83 36·17 39·13 39·2	42·38 4·14 . 1·85 ·88 2·12	40·08 6·23 6·58	4,787 4,791 10,5 3 11,902 20,472	21.05 10.83 33.02 £0.97 55.87	96 187 227 109 103	*42 *40 *71 *28 *29
34,762	11,360	12,415	89.95	50.83	35.38	11.00	35.71	£2,505	29.81	727	'41
411 456 894 740 574	233 62 419 356 404	 133 52 11	92·33 90·44 97·10 94·33 91·18	64:17 13:60 55:03 51:74 72:14	17:01 13:34 53:63 78:9.) 27:25	3·62 3·62 3·11 •43	 14.88 7.03 2.11	7,789 * 15,219 38,4*7 9,507	16:86 * 40:40 8:00 33:31	87	*51 * *26 *18 *54
3,105	1,524	199	94.44	52.44	45.2)	1.23	€.41	70,7:2	44.49	572	•36
4,030 41 52 42, 41 69	211	47	94·78 85·13 90·70 73·13	50·56 1·02 55·97 · 09 (9·2)	(9:33 44:33 56:59 26:43 27:85 21:72	1·15 2·33 1·95 	13·52 11·08 5·80	12,159 4,185 9,121 4,151	52:07 113:67 47:64 3::31 12:67 13:80	161 118 83 115	*32 1·51 1·44 *33 *36
4,060	-	59)	87.55	49.78	39.72	1.10	12:79	44,936	40.20	569	•54
1,967 749 3 33	$egin{array}{c c} & 42 : \\ \hline & \end{array}$	47		€0.97 51.52	26·97 55·71 17·11 23·47 19·72	•07	 6·28 		34·81 87·15 11·14 33·12 13·24	•••	·15
2,752	1,264	53	91.48	46.83	31.93	•83	1.98	20,592	27.45	52	
606 2,661 278	$1 \mid 1,61$	3 202		65·80 30·94	49.82 66.56 58.96 51.01	2.54		7,895 9,442 8,23	35·26 58·43	94 86	·04 •24 •28
3,545	2,050	258	5 - 91.22	62.31	57.21	2.29	7.18	40,451	41.95	3 1(2	•25
2,444 16 157 47	7 5 2	5 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	91.87	11:35 £0:89 57:14	63:80 22:65 83 03 53:06	4:33 1:91 •76	14·0 23·6 10·6	2 5,093 6 6,626 1 9,023	14.66 23.8 37.4	5 235 3 162 1 152	•81 •85 •63
2,818	1,79	2 14	8 91.4.	67:24	41.05	5.00	5.5	38,746	36.5	4 578	•61
411 19 730	$\begin{bmatrix} 1 \\ 1 \end{bmatrix}$ $\begin{bmatrix} 22 \\ 16 \end{bmatrix}$	6 15	6 88.7	0 87·94 7 89·73	35.4	6.87 3 2.45	37·4 3·1 12·0	9,272 4 5,501 9 9,380	2 39·3 39·7 0 26·4	109 7 11 205	•50 •01
1,34	1 66	6 25	94.3	4 61.16	38.0	4.3	18.7	9 30,787	31.5	345	*87
110			$ \begin{array}{c c} 4 & 89.2 \\ \hline & 84.1 \\ \hline & 86.0 \end{array} $	9 60.39	_	1 1.2	3.6		10.4		
			79.1	1 63·67 50 53·2	_	_	7	 65 3,26,12	7 32-5	***	•••

Pakokku Chin Hills have been excluded, been included in Ma-ubin.

A.—VACCINATION STATEMENT No. II.—Showing the cost of the Department in the

		ž.			*				ing the c		Expendin			
No.	Circles and	Districts.		European super- vising officers.	Pay.	Native supervising officers.	Pay.	Vaccinators.	Pay.	Clerks.	Pay.	Peons, etc.	Pay.	Total pay of establishment.
1		2		3	4	5	6	7	8	9	10	11	12	13
	ARAKAN	Division.			Rs. A. P.	1	Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.
1 2 3 4	Akyab Hill Tracts, Nor Kyaukpyu Sandoway	•••	 	•••	*****	2	900 0 0	10 1 6 3	355 0 0 1,483 12 9		******	•••	•••••	3,724 13 2 355 0 0 1,483 12 9 8.4 0 0
		Total	•••			2	900 0 0	20	5,477 9 11					6,377 9 11
	Prau D	IVISION.												
5 6 7 8 9	Rangoon Hanthawaddy Pegu Tharrawaddy Prome		•••		•••••	1 1 1 	615 0 0 480 0 0	8	2,618 11 4 1,547 14 4 2,214 8 0 2,265 7 3 3,250 7 1		•••••	4	5 76 0 0	3,194 11 4 2,172 14 4 2,214 8 0 2,745 7 3 7,250 7 1
	,	Total			•••••	2	1,105 0 0	37	11,897 0 0	1	•••••	4	576 0 0	13,578 0 0
	IRRAWADDY	Division.												
10 11 12 13 14	Ma-ubin Pyapôn Bassein Henzada Myaungmya	 Total	1			2 2		4 5 10 15 7 41	3,317 10 2 1,415 12 7 2,546 2 6 4,316 4 8 1,473 0 6	3			•••••	3,317 10 2 1,415 12 7 3,255 2 6 4,316 4 8 1,473 0 6 13,777 14 5
						-				1				
- 1		M Division.			•••••		1 100 0	1	0.100		100.0			2440
15 16 17 18 19 20	Amherst Tavoy Mergui Toungoo Thatôn Salween	***	•••		******	1 1 1	1,190 0 0 430 0 0 480 0 0	5 4 0 7 0 6 1 1	1,017 14 7 1,616 12 0 1,691 0 0 ;00 0 0	0			******	3,440 8 1 1,435 0 0 1,017 14 7 2,096 12 0 2,171 0 0 300 0 0
		Total	•••		******	- 4	2,150 0 0	31	8,191 2 8	1	120 0 0			10,461 2 8
	MANDALAY	Division.									1			
21 22 23 24 25	Mandalay Bhamo Katha Ruby Mines Myitkyina	 Total	•••	•••		1	600 0 0	3 2 3 1	450 7 2 923 6 7	2				3,822 1 6 794 0 0 430 7 2 923 6 7 360 0 0 5,829 15 3
	SAGAING	Division.										-		
26 27 23 29	Shwebo Sagaing Lower Chindwi Upper Chindwii		•••					8 6 6 6 2;	1,625 4 8 1,527 0 0 1,620 0 0 1,550 7 3 6,3-2 11 11	3	•••••] 		1,625 4 8 1,527 0 0 1,620 0 0 1,550 7 3 6,322 11 11
	Minbu 1	Division.	***	-				-		-				
30 31 32 33	Thayetmyo Pakôkku Minbu Magwe	 Total	•••		•	1	120 0 0	ļ	2,319 4 2 1, 5 65 0 0 1,616 15 6 1,625 8 0					2,319 4 2 1,565 0 0 1,616 15 6 1,745 8 0 7,246 11 8
	Meiktila	Division.	•••			-				-				
84 3 5 36 87 33	Meiktila Vaccin Meiktila Yamethin Kyauksè Myingyan	e Depôt	•••	1 	600 0 0	1 1	1,200 0 0 60 0 0 378 0 0	5 7 3 7	911 0 0	7 9	596 10 8		231 0 0	1,214 8 2 1,678 3 7 911 0 0 1,874 0 9
		Total	•••	_1	600 0 0	3	1,638 0 0	23	5,239 12 6	1	506 10	8	1,231 0	9,805 7 2
	Shan S						450				1			
39 40	Northern Shan S Southern Shan S		•••		*****	1	450 0 0	8 7	2,018 11 8 1,646 2 7	3	*****		•••••	2,493 11 8 1,646 2 7
		Total	•••		•••••	1	450 0 0	15	3,694 14 3	3		<u> </u>		4,144 14 3
	Chin I	Hills.												
6 1	Chin Hills	**1	•••					2	631 6 10					631 6 10
	GRAND T	OTAL	•••	1	600 0 (16	7,672 0 0	241	66,880 3 6	2	716 10 8	3 12	1,807 0 0	77,675 14 1

DÉPARTMENT.

Province of Burma during the year 1905-06 (Paragraphs 2 and 5).

					PAID FROM				s and	
Travelling allowance.	Contingen-	Total cost.	Imperial Funds.	Provincial Funds.	Local Funds.	Municipal- ities.	Native States.	Total.	Number of all successful vaccinations and re-vaccinations.	Average cost of each successful case.
34	15	16	17	18	19	20	21	222	23	24
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.		Rs. A. Po
911 0 9 71 3 0 353 7 0	60 0 0 520 5 5	4,095 13 11 425 3 0 2,357 9 2	*****	426 3 0	4,31i 13 11 2,250 9 2 978 5 9	384 0 0 107 0 0 120 0 0		4,695 13 11 426 3 0 2,357 9 2 1,093 5 9	9,783 - 429 3,923 1,450	0 7 8 0 15 11 0 9 7 0 12 0
229 1 0 1,564 11 9	55 4 9 	1,093 5 9 8,577 15 10		425 3 0		611 0 0	•••••	8,577 15 10		0 8 10
19 15 6 871 12 5 1,052 10 9 1,380 15 0 916 6 0	37 9 6			3#1 15 6	3,082 4 3 2,737 2 9 4,132 6 3 3,205 7 10	560 0 0		6,397 14 6 3,0-2 4 3 3,297 2 9 4,132 6 3 4,106 13 1	5,532 12,232 15,477	0 5 10 0 8 11 0 4 4 0 4 3 0 4 7
4,276 11 8	3,221 13 2	21,076 8 10	*****	341 15 8	13,157 5 1	7,577 4 3	*****	21,076 8 10	65,321	0 5 2
335 7 10 393 0 0 925 11 8 1,202 8 0 470 14 0	35 3 0	3,653 2 0 1,803 12 7 4,216 1 2 5,515 12 8 1,943 14 6	••••	•••••	3,653 2 0 1,535 11 8 3,493 9 2 3,813 2 8 1,943 14 6	270 0 11 717 8 0 1,705 0 0	•••••	3,653 2 0 1,803 12 7 4,216 1 2 5,518 12 8 1,943 14 0	3,67 5 2 1,010 33,232	0 12 1 0 7 10 0 3 3 0 2 4 0 4 1
3, 27 9 6		17,140 10 11			11,448 2 0	2,092 8 11		17,140 10 1	75,351	0 3 8
1,033 10 0 458 0 6 (43 14 8 437 10 0 783 4 0 67 8 0	105 13 8 20 13 10 	2 4,617 0 3 1,923 0 6 3 1,767 10 11 0 2,555 3 10 2,954 4 0 2,67 8 0			3,423 4 5 1,443 0 6 1,476 0 1 2,075 3 10 2,695 4 0 307 8 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	*****	4,617 0 3 1,923 0 6 1,767 10 1 2,555 3 16 2,954 4 6 357 8	4,881 5,004 7,381 7,163	0 3 7 0 6 4 0 5 8 0 5 6 0 6 7 0 7 2
3,453 15	2 269 9 8	14, 84 11 6			11,480 4 10	2,704 6 8		14,184 11	6 46,063	0 4 11
227 3 2.7 4 398 9	0 72 4 9 8 332 4 6	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		2,433 2 6 758 1 1 1,000 1 1 10 932 6 1 623 3 8	3	1,670 15 6 305 6 4	••••	4,104 2 1,93 7 1,009 15 1 0 1,322 0 523 3	7 4,430 0 3,015	0 4 10 0 3 11 0 5 4 0 8 6 0 6 4
	2 411 4	6 8,052 12 1	1	5,636 13	1	1,976 5 10	389 10	0 8,052 12 1	24,820	0 5 9
852 4 24 3	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 2,418 5	1 9 1	2,443 5	1	240 0 0 293 0 0		2,387 5 2,489 4 1	9 18,814 2 16,296 1 7,977	0 2 1 0 2 4 0 5 0
2,673 3	0 1,817 5	0 10,813 3 1	I	10,275 3 1	1	538 0		10,813 3 1	57,237	0 3
738 9 465 6		2,03 9 0 2,083 5	2 0 6 6		2,799 14 0 6	249 0 0 606 0	 0 0	3,425 9 2,303 9 2,083 5 2,179 12	2 15,29 0 8,076 6 7,723 6 13,090	0 4 0 4 0 2
2,727 4	0 23 4	6 9,997 4	2	5,416 11	2,799 11	2 1,780 11	0	9,997 4	2 44,183	0 3
741 12 713 15 506 7 786 5	6 6 9 2 11	1,956 4 2,392 3 1, 17 7	8 1 0 0	1,956 4 1,889 15 1,137 7 2,372 14	0	80 0 290 4	700	9,099 15 1,566 4 2,392 3 1,217 7 2,663 2	8 10,75 1 9,846 0 5,006 0 12,149	0 3 1 0 3 1 2 0 3
2,548 8	9 5,475 0	2 17,329 0	1	16,456 8	6	872 7	7	_ 17,329 0	37,74	
1,459 8 779 0	0	3,958 3 2,1:5 2	8 1,246 2 7 2,425 2	8	•••••	•••••	2,712 1	0 3,958 3 2,425 2	8 6,14 7 10,54	0 3
2,238 8	0	(,3/3 6	3 3,671 5	3			2,712 1	0 6,383 6	3 16,63	2 0 6
276 14	0	938 4 1		- 	*****	***	*****	908 4		
1	0 11,692	M 1,14,468 15	3 4,579 10	1 88.608 7	0 49.426 6 1	1 13,752 12	3,101 11	0 1,14,463 16	3,85,38	0 4

B.—DISPENSARY
STATEMENT No. III.—Showing Dispensary Vaccination in the

No)•		Dis	tricts.			Number of dispensaries in each district to which a vacci- nator is at- tached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Total.
• 1	-			2			3	4	5	6	7
		•	ARAKAN	Divieto			<u> </u>				
	1				***		£****		*****		*****
	$\frac{1}{2}$	Hill Tracts, No	orthern A	rakan	•••	•••	•••••	•••••	70 103	•••••	60 85
	4	Sandoway	•••	•••	•••	***	*** **	*****	332		214
					Total	•••	*** ***		505		359
			PEGU I	D1v15101	N.						
	5 6	Rangoon Hanthawadd y	•••	•••	•••	•••	*****	*****	2,200	101	442
9	7 8		•••	***	•••	•••	•••••		197 167	•••••	197 150
	9	Prome .	•••	•••	•••	•••	•••••	••• ••	47	•••••	47
					Total	•••		*****	2,671		836
		I	RRAWADD	y Divis	10 N•						
1		Ma-ubin Pyapôn	•••	•••	•••	•••	*****	••••	2,695 257	•••••	1,116 233
1	2	Bassein	•••	•••	•••	•••	*****	•••••	606 1,121		412 273
1 1		Henzada Myaungmya	•••	•••	***	•••	*****	*****	1,802	*****	868
					Total	•••			6,481		2,907
		T	ENASSERII	M Divis	ION.						
1		Λ mherst	•••	•••	•••	•••	******	*****	*****		*** ***
1	L6 L7	Tavoy Mergui	•••	•••	•••	•••	•••••		193 52		14 52
1		Toungoo Thatôn	•••		•••	•••	••••		1,235 267		872 267
	20	Salween	***	•••	•••	•••		*****	6		. 4
					Total	•••		•••••	1,803		1,209
		1	Mandala	y Divis	SION.						
	21	Mandalay Bhamo	•••	•••	•••	•••		*****	258 64		214 63
2	23	Katha Ruby Mines	•••	•••	•••	•••	•••••	*****	325 190		70 190
	25	Myitkyina	•••	•••	**	•••	•••••	00000	107	*****	1.6
					Total	***	*****		914		673
			SAGAING	Divisi	ON.						
	26	Shwebo	•••	•••	•••		••••		102		69 102
2	27 23	Sagaing Lower Chindw	in	•••	•••	•••	*** **	•••••	175	•••••	*****
2	29	Upper Chindw	/in	***	•••	•••	*****	** ***	466	•	388
					Total	•••	•••••		743		559
•	ļ		MINBU	Divisio	N.						
9	30 3 1	Thayetmyo Pakôkku	•••	•••	•••	•••	*****	*****	1,0 <u>44</u> 13		832 13
á	32 33	Minbu Magwe	•••	••	•••	•••	*****	******	6± 296		42 122
·	-0		•••	***	 Total	***	•••••	ASS	1,417		1,009
			MEIKTILA	A Divis							
	34	Meiktila	•••		***	•••	*****	*****	599	····	222
- 2	35 36	Yamethin Kyaukse		•••	•••	•••	•••••	******	29 56	•••••	29 52
É	37	Myingyan	•••	•••	T-tol	***					303
			SHAV	STATES	Total	***		•••••	684		508
9	38	. Northern Sha		STATES					286		247
	39 	Southern Sha		•••	•••	•••	•••••	•••••	349	••••	333
					Total	•••			635		580
. 4	40	Chin Hills	•••	•••	•••	***		•••••	1,619		1,377
				GRANE	TOTAL	•••		*****	17,507	***	9,812

VACCINATION.

Province of Burma for the year 1905-06 (Paragraphs 5 to 8).

	PRIMARY VA	ACCINATION.		R	E-VACCINATION	٧.	SUCCESSFU WHICH TH	TAGE OF L CASES IN E RESULTS KNOWN.	Percent, unknown c total ca	ASES TO
	Successful.		Unknown.	Total.	Successful.	Unknown.	Primary.	Re-	Primary.	Re- vaccina-
Under one year.	One and under six years.	Total of all ages.	Oukrown.	10,000				vaccination.	•	tion.
8	9	10	11	12	13	14	15	16	17	18
2 4	 26 32 1	 54 65 203	 4 15	 10 18 118	 9 9 23	7	96·43 92·86 91·86	90·00 81·82 19·49	 6·67 17·65 	 38·8 9
6	59	322	19	146	41	7	\$4.71	29.50	5.29	4.79
29 68 37 18	 167 110 54 29	393 187 140 47	 17 8 	;;s18 17	 1,231 12	73 .:. 	93·8· 98·94 93·33 100	70 54 70 59	3·85 4·06	4 02
152	860	773	25	1,835	1,213	73	95:31	70.24	2.99	3 98
218 48 27 - 36 68	475 133 104 143 212	1,077 217 272 270 398	6 94 455	1,579 19 191 848 931	621 12 82 331 453	12 4 68 88 41	96·51 93·53 85·53 9 · 90 96·37	39·63 60 00 65·08 43·55 50·73	2 52 22 82 22 82 52 42	•76 21·05 35·05 10·38 4·39
397	1,067	2,234	555	3,574	1,499	2.3	94 93	44.60	19 09	5.96
 2 8 266 27	10 23 298 90	 14 50 669 204 3	 156	" 184 " 413 " 2	3± 203 	 60 	 100 96·15 93·44 76·40	18·48 57·51 	17·89 25·00	14·53 100
303	421	910	157	509	237	62	89•35	44.13	12.99	10.32
77 12 5 63 17	139 43 34 112 67	222 58 63 189 88	 3 	14 1 255 	2 1 96 	 39	90.93 92.06 91.03 99.17 83.02	14·29 100 44·14 	 4·29 	 15·29
174	395	620	3	271	100	39	92 54	43:10	'45	14.89
3 57 52	28 36 212	36 93 333	3 4	33 73 78	7 80 63	4 41 10	54·55 91·18 88·02	24·14 93·75 92·65	4*35 1 03	12·12 56·16 12·82
112	276	467	7	184	100	55	84.60	77.52	1.25	29.89
201 	\$07 10 5	668 11 41 122	84 1	21 2 22 174	159 6 118	8 6	89 30 84 62 100 100	77·94 37·50 67·82	10·10 2·38	3·77 27·27
201	322	842	85	408	283	14	91.13	71.83	8:42	3.43
24 24 18	71 1 18	103 27 36	37 22 6	377 4	1 1	150 	58:33 100 78:16		16.67 6.90 11.54	39.79
66	90	171	45	381	108	031	60.28	46.75	14.35	39•37
32 93 125	166	297	34	39 16 55	11	1	90•74 90•38 95•78	73.33	12·55 16·2 1 11·21	6.2
33	146	410	810	242	161	13	72:31	70.31	58:82	5137
1;669	3,420	7,272	1,771	7,695	3,801	627	90.44	53•78	18.05	8:

COMPARATIVE STATEMENT No. IV.—Showing the number of persons primarily vaccinated Burma in each of the under-

											Persons pi	RIMARIL¥
Establi	shments.		Total number.	Number success- fully vac- cinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number success- fully vac- cinated.	Total number.	Number success-fully vac-cinated.
			1890	6-97.	189	7-98.	1898	-99.	1899-1	900.	1900	-01.
	1			2		3		4		5	(3
Government	•••	•••	118,666	110,486	95,153	88,851	116,621	106,892	122,193	112,483	106,629	95,39 2
Municipal ·	•••	•••	83,232	78,036	82,934	78,827	81,987	78,€36	72,2 87	69,705	62,338	58,008
Local Funds	•••	•••	188,718	172,580	222,231	210,850	238,334	228,357	260,5 1 8	218,803	215,111	198,789
Native States	•••			•••	***	•••	2,108	1,941	1,764	1,631	1,574	1,420
Dispensary	•••	***	5 ,4 66	4,961	5,151	4,891	8,209	7,278	6,033	5,421	6,653	4,229
A	RMY.						1			}		
Europeans	•••	•••	31	26	80	50	53	42	23	19	23	10
Natives	***	•••	655	390	379	249	546	363	7 8 2	311	391	207
	Tot	al	396,818	366,482	405,928	383,748	447,858	423,519	463,605	438,406	392,719	358,055

STATEMENT NO V .- Showing particulars of

						-	TOTAL NUMBE	R INSPECTED,	,
No.	Distr	icts.			SEER OF PERSONS	By Deputy missioner or	Sanitary Com- Civil Surgeons,	By Native or other Ins	Superintendents specting Officers.
				Primary.	Re-vaccination.	Primary.	Re-vaccination.	Primary.	Re-vaccination
1		2		3	4	5	6	7	8
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 22 23 24 25 26 27 28 9 80 31 22 33 4 85 36 87 33 4 9 40	Akyab Hill Tracts, Norther Kyaukpyu Sandoway Rangoon Hanthawaddy Pegu Tharrawaddy Prome Ma-ubin Pyapôn Bassein Henzada Myaungmya Amherst Tavoy Mergni Toungoo Thatôn Salween Mandalay Bhatno Katha Ruby Mines Myitkyina Shwebo Sz gaing Lower Chindwin Upper Chindwin Upper Chindwin Upper Chindwin Thayetmyo Pakôkku Minbu Magwe Meiktila Yaméthin Kvauksè Myingyan Lashio Taunggyi Chin Hills	n Arakan		11,9'8 553 5,0'0 1,889 15,143 7,112 12,939 17,312 15,652 6,042 4,368 22,392 40,469 8,813 20,8'6 5,164 6,069 8,934 10,056 1,030 14,467 4,458 3,236 2,891 1,587 15,8 2 19,386 17,756 9,121 14,066 11,397 10,353 5,639 14,007 7,233 12,934 4,610	804 12 93 422 30,368 4,6 3 236 27 1,413 2,000 475 1,088 1,588 1,508 4,030 225 52 837 44 71 1,981 750 258 33 1 639 2,734 278 78 2,657 164 179 221 380 411 195 73; 39 126 236	851 19 260 349 7,255 763 1,784 381 1,822 1,540 425 3,6,6 3,140 1,429 1,168 3,114 2,534 826 4,293 94 8,351 2,888 9 5 722 418 3,905 2,071 2,295 1,639 1,184 2,742 1,381 2,318 4,745 2,354 1,467 3,65 1,071 483 100	672 1 31 266 12,630 1,091 36	3,721 43 181 214 480 4,208 904 8,096 1,249 1,675 687 12,828 1,4 1 282 9,(06 419 291 3,850 5,138 7,032 269 61 167 7,796 33 51 384 2,011 13 794 1,446 1,361 229 1,189 2,409 1,322 91 1,322	6±8 9 1 118 1,756 2,486 52 17 769 1,589 5 721 327 541 3,288 185 24 355 68 169 85 25 266 68 525 27 187 17 113 39 2 210
30		D TOTAL	**	426,935	61,992	75,650	20,844	92,319	14,697

and the number of those persons who were successfully vaccinated in the Province of mentioned official years (Paragraph 4).

WACCINATED.

Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.
193)1.02.	190	2-(3.	190	3-04.	190	4-05.	1905	
	7	8	3		9		10	1:	1
94,530	83,082	120,384	101,166	135,394	109,016	138,435	109,201	162,014	144,074
52,227	46,695	55,352	47,049	53,775	44,879	£9,4:0	46,168	64,883	52,898
181,107	166,283	165,2:8	149,585	179,917	160,516	166,339	141,€26	181,999	160,428
1,822	1,55 3	7,053	5,451	6,712	5,624	6,986	4,989	8,197	6,983
3,971	3, 033	6,622	5,038	8,924	6,915	9,516	7,152	9,812	7,272
								,	
20	9	25	11	•••	•••	25	14	66	38
114	67	859	283	380	222	379	215	304	183
									220.00
333,791	300,722	355,013	808,583	385,102	3 2 7,172	381,090	309,365	427,305	371,376

Vaccination verified by Inspecting Officers.

I EROENI	rage of inspect vaccin				GE OF CASES FO NUMBER 1			December	
	anitary Commis- hwil Surgeons.		Superintendents ecting Officers.		ânitary Con.mis- uvil Surgeons.	By Native S or other Ins	uperintendents becting Officers.	Percentage REPORTED BY	OF SUCCESS VACCINATORS
Primary.	Re-vaccina- tion,	Primary.	Re-vaccina- tion.	Primary.	Re-vaccina-	Primary	Re-vaccina-	Primary.	Re-vaccin tion.
9	10	11	12	13	14	15	16	17	18
7·14 3 44 5·13 18·48 47·91 10·73 13·9 2·19 11·64 25·49 9·70 16·42 7·76 16·42 6·61 60·11 41·75 9·2 42·69 9·13 23·16 64·78 28·28 24·97 26·34 24·70 10·71 12·93 17·12 6·76 29·74 15·17 16·76 41·63 22·74 23·02 27·59 14·81 3·73 2·17	88-58 8:3 33:33 63:03 41:47 22:65 15:25 13:31 64:41 42:92 33:56 38:02 2:28 1:33 32:38 21:18 11:51 45:60 50:69 160 8:61 3:15 4:32 25:67 85:98 25:14 3:62 55:26 59:66 73:10 51:28 28:57 10:53	31·22 7·78 3 57 11·33 3·17 6·99 46·55 7·98 27·72 15·67 57·29 3·49 3·20 43·26 8·11 4·79 43·09 51·09 48·61 6 03 1 :89 10·52 49·30 11·49 14 8·71 10 32 1·32 13·15 4·06 70·88 33·81 10·22 19·98	80·60 75·00 1·08 27·96 5·79 53·89 22·03 (2·96 54·42 78·66 1·05 66·27 20·59 35·88 81·59 62·22 46·15 42·41 3·43 22·53 32·95 3·91 15·08 84·62 4·47 16·03 100 1·59 78·95	88·72 73·68 85·60 90·16 84·82 96·72 95·63 97·90 91·55 92·01 93·64 95·48 96·91 94·61 88·27 93·46 75·69 89·69 96·07 95·57 83·01 92·68 89·14 94·51 81·03 92·68 89·14 94·51 81·03 95·19 89·60 83·31 89·57 97·96 89·25 98·05 91·41 88·66 98·62 67·00	71·88 100 64·52 26·22 12·68 78·28 75·00 32·45 3.·51 56·75 65·85 61·41 27·17 (9·37 100 45·45 60·47 41·67 98·83 11·35 66·67 62·50 48·10 48·47 39·78 40·00 66·67 46·48	86'43 100 66'85 94'86 80'42 74'38 94'36 87'94 92'47 93'73 95'78 96'39 98'84 92'31 99'56 91'84 71'93 81'00 91'82 700'00 84'43 80'61 81'82 100 88'02 93'24 84'62 92'05 94'05 51'33 99'85 100 85'62 692'13 83'57	73.61 88.89 100 19:49 65:09 24.42 90:38 70:59 42:78 39:71 100 53:68 42:51 45:4 52:13 17:54 4:17 55:21 50:00 68:05 51'76 24:00 30:45 92:65 89:52 44:44 67:38 36:29 44:92 46:15 10 70:95	80 79 90:50 85:14 82:39 84:86 76:34 96:68 90:52 82:41 92:33 90:44 97:10 94:33 91:18 92:58 94:78 85:13 90:70 73:13 77:31 89:60 84:72 95:56 91:83 91:73 91:35 89:77 86:08 94:83 97:42 10 88:77 89:95 89:27	76 1 1 63 65 65 65 65 65 65 65 65 65 65 65 65 65
17.72	33.(2	21.62	28.71	90.25	54.25	87.22	44.77	90.80	23.

APPENDIX A.

Showing the ratio per 10,000 successfully vaccinated and the mortality from small-pox by quinquennial periods for Lower Burma only.

- (Official yea	ır•		Ratio per 10,000 successfully vaccinated.		nquennial mean.		Calendar	year.		Ratio for 10,000 of mortality from small-pox.	Quinquen nial mean,
	1			2		3		4			5	6
1890-91	•••	•••		24 1· 7 3	6		1890	•••	•••	•••	10-11	1
1891-92	•••	•	•••	214.17			1891	•••	•••	•••	2.89	İ
1892-93	•••	•••		257.91	}	274.35	1892	•••	•••	•••	3.21	5.19
1893-94	•••	•••		803-46			1893	***	•••	•••	6.83	
1894-95	•••	•••		353.83	}	ę	1894	•••	•••	•••	3 •85	}
1895-96	•••	•••		448.91	1		1895	•••	•••	•••	3.41	7
1896-97	•••	•••	•••	554.43			1896	•••	•••	•••	3.40	
1897-98	•••	•••		586.66	1}	584.16	1897	•••	•••	•••	4.32	7.05
1898-99	•••	•••	•••	652 · 47			1898	•••	•••	•••	10.40	
1 8 99- 1900	•••	•••	•••	678.31			1899	•••	•••	•••	13.21	}
1900-01	•••	•••	•••	530.41	7		1900	•••	•••	•••	6.76	j
1901:02	•••	•••		352.69			1901	•••	•••	•••	4.45	
1902-03		•••	•••	323.01	}	372.41	1902	•••	•••	•••	2.82	3.62
1903-04	•••	•••		353•66			1903	•••	•••		2.30	
1904-05	•••	•••		324.89	ز		1904	•••	•••	•••	2 38	١
1905-06	•••	•••		385.48		•••	1905	•••	•••		10.10	•••

APPENDIX B.

Statistics relating to the number of children under one year of age in towns available for vaccination and the number of successful operations performed on them (Paragraph 11).

	То	wns.			Number of births during the year 1905- 06.	Number of deaths among children under one year during the year 1905-06.	Number available for vaccina- tion after deducting the num- bers who have died as shewn in column 3.	Number of successful vaccinations on children under one year during the year ending 3 st March 1908.	Date of extension of Vaccination Act into town.
	1				2	3	4	5	6
Akyab Kyaukpyu Sandoway	•••	•••	•••	•••	586 55 100	216 5 13	370 50 87	407 31 72	August 1883. April 1891. September 1890.
Ranggon Pegu Prome	•••	•••	•••	•••	4,239 488 920	1,471 130 213	2,768 358 677	2,293 310 655	April 1834. March 1893. June 1890.
Paungdè Gyobingauk Letpadan	•••	•••	•••	•••	455 221 334	103 63 93	352 158 211	349 88 60	August 1890. February 1897. January 1897.
Thinzè Ma-ubin Yandoon	•••	•••	•••	•••	222 167 413	56 46 105	166 121 308	121 68 2 66	October 1897. October 1891. January 1892.
Pyapôn Kyaiklat Bassein	•••	•••	•••	•••	307 924 213	76 70 2 56 5 0	373 237 668	158 110 692	November 1901. 15th December 1901 September 1888.
Ngathainggyaung Myaungmya Henzada Zalun	•••	***	•••	•••	96 915 263	35 263 66	163 61 647 197	112 87 531 179	February 1890, June 1891 January 1889.
Myanaung Moulmein Thatôn	•••	•••	•••	•••	253 1,407 434	47 253 101	206 1,154 333	295 1,132 233	August 1894. July 1889. August 1885. October 1891.
Kyaikto Tavoy Mergui	•••	•••	•••	•••	195 823 437	43 145 81	152 683 356	82 709 2 85	March 1897. December 1889. October 1891.
Toungoo Shwegyin Mandalay	•••	*** *	•••	•••	573 212 5,701	151 38 2,066	422 174 3,635	367 195 4,265	May 1889. January 1890. August 1891.
Sagaing Mônywa Thayetmyo	•••	•••	•••	•••	336 315 421	101 110 151	235 205 273	19.) 245 492	April 1894. March 1893. May 1889.
Allanmyo Yamethin Pyinmana	•••	100	•••	•••	$egin{array}{cccc} 475 & & & & & & \\ & 271 & & & & & & \\ & 441 & & & & & \\ & 576 & & & & & & \\ \hline \end{array}$	73 81 45 204	402 190 396	661 186 396	May 1901, February 189 2 , November 1831.
Myingyan Shwebo Pakôkku Kyauksè	•••	***	•••	•••	271 868 292	99 340 93	372 172 623 199	372 187 491	September 1891. June 1894. April 1892.
Minbu Salin Taungdwingyi	-0 -0 -0 -0 -0	•••	•••	•••	221 221 251 299	51 65 106	170 186 193	235 166 149 84	May 1894. March 1896. March 1896. February 1893.
			Total		26,447	7,809	18,638	18,035	

G. B. C. P. O.—No. 13, I. G, C. H., 14-7-06—400—J. S. D'C.



APPENDIX C.

Diagram showing the proportion of population protected during the seven official years from 1899-1900 to 1905-06, and the death-rate from small-pox during the calender year 1905 in

Districts where registration is in force.

Properties of pr
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7,400 6,800
6,800
6,400 6,300 5,500 5,500 5,400 6,400 6,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400 7,400
6,000
6,000
5,800 5,400 5,400 5,300 4,800 4,800 4,200 4,200 3,300 3,300 3,400 3,400 3,400 3,400 3,400 3,400 3,400 3,400 3,400 3,400 3,400 3,500
5,400 5,400 5,300 4,500 4,500 4,500 3,600 3,400 3,400 3,600 3,400 4,600 4,600 4,600 5,400 5,400 5,400 5,400 5,400 5,400 5,400 5,400
5,400 5,300 4,800 4,400 4,400 3,300 3,400 3,400 3,100 3,100 3,100 4,100 4,100 4,100 5,100
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4,600 4,400 4,700 4,000 3,800 3,800 3,400 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700 3,700
4,600 4,300 4,000 3,80e 3,600 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100
4,400 4,200 4,200 3,800 3,100 3,100 3,100 3,100 3,100 4,000
4,300 4,300 4,000 3,800 3,600 3,200 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000 3,000
4,000 3,800 3,600 3,400 3,200 3,800 3,600 3,600 3,600 3,600 3,000
3,800 3,400 3,200 3,800 2,400 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100 3,100
3,600 32.00 3.600 32.00 3.600 32.00 3.600 3.600 32.00 3.600 3.
3,400 3,000
3,000 16.0 15
3,000 14-0 3-0
2,600 2.602 2,400 10.60 3.00 3.00 3.00 3.00 3.00 3.00 3.00
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\$\frac{\frac{1}{3}}{3}\frac{1}{3}

2,000 // // // // // // // // // // // //
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G.B.C.P.O-NO, 13 1, G. C.H. 13-7-06-405 LIT HO Compared to the comparison of population protected per 10,000.

G.B.C. P. O-NO, 13 1. G. C.H. 13-7-06-405 LIT HO

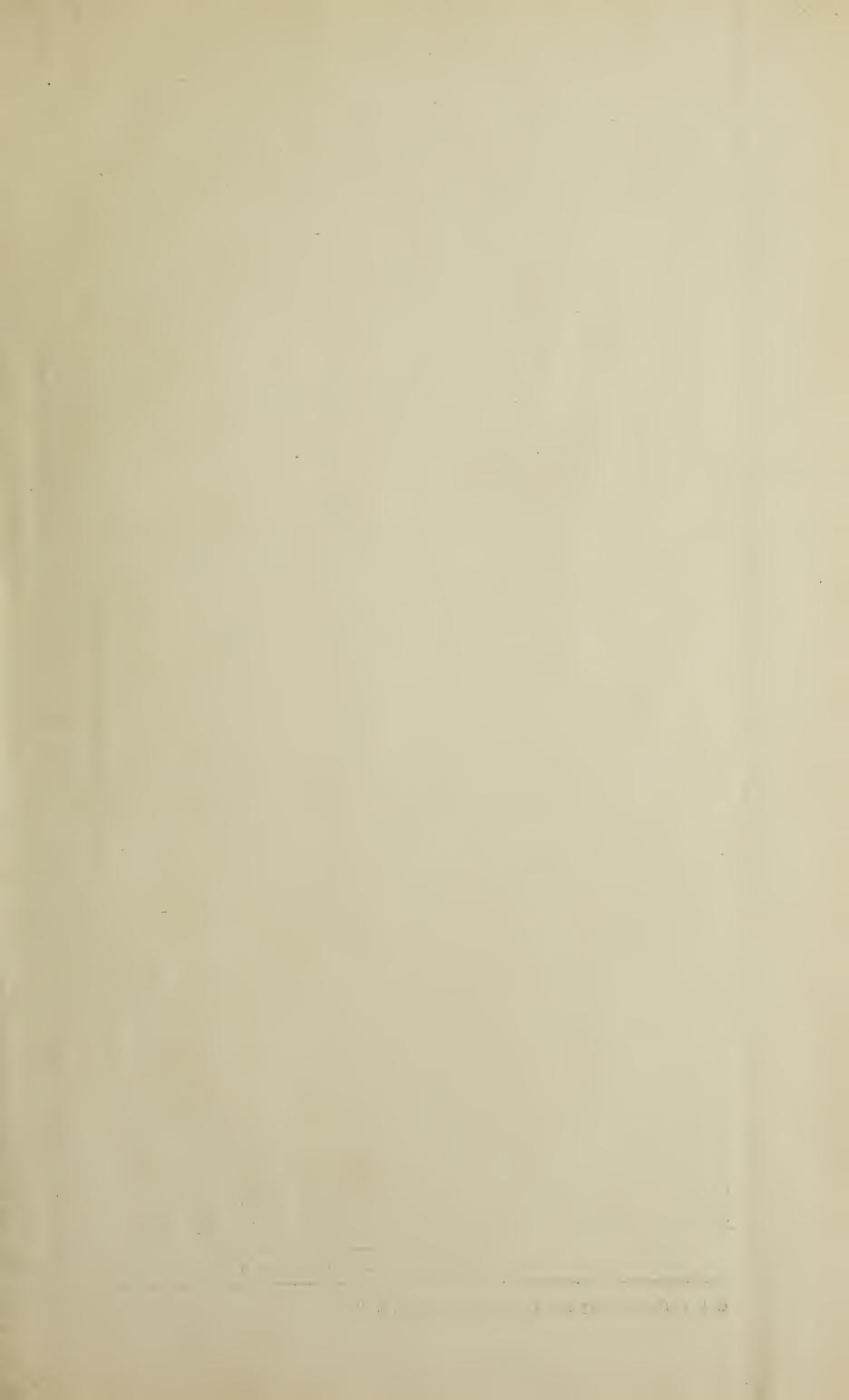
Indicates proportion of population protected per 10,000.

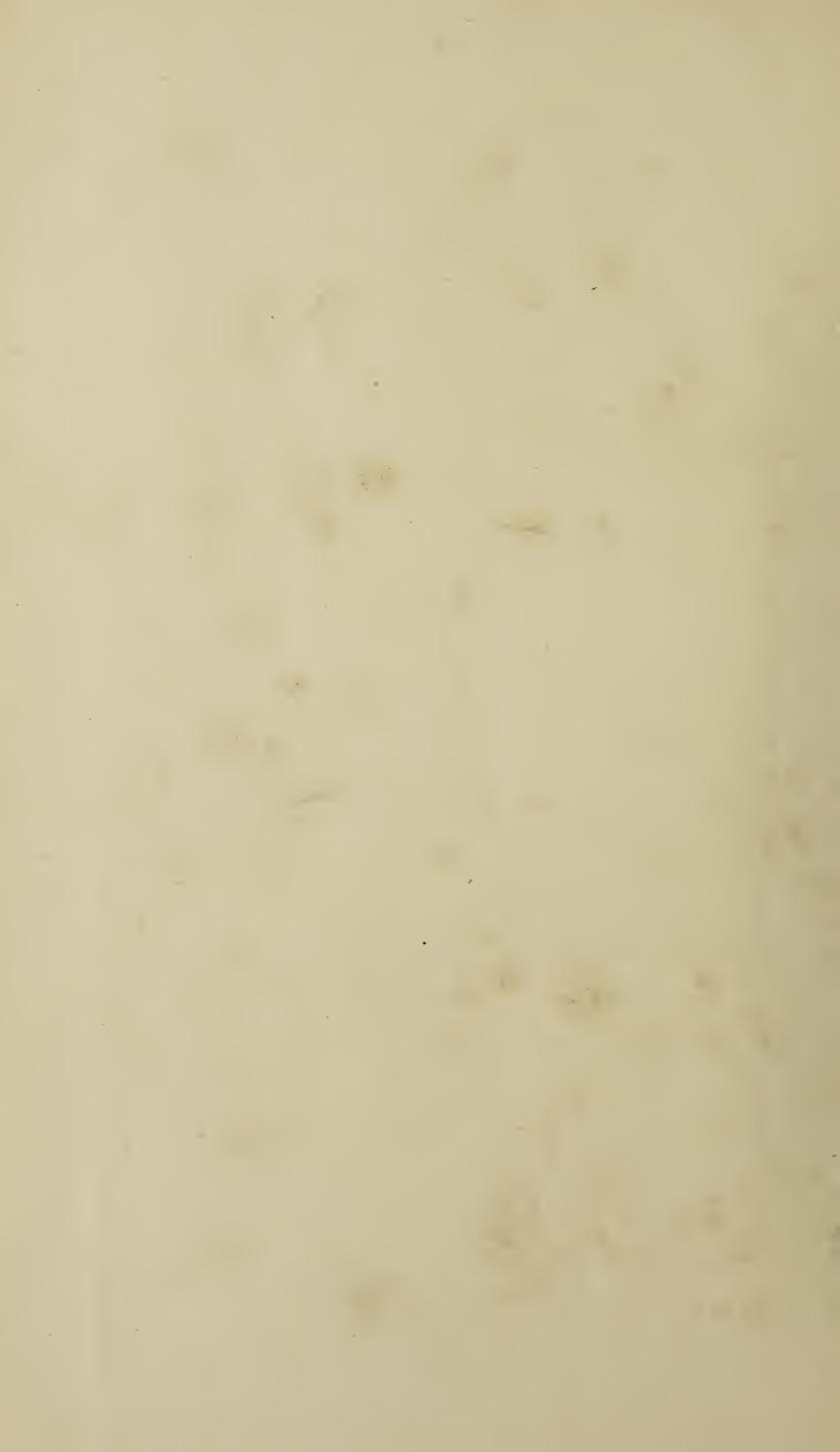
Indicates rates of death from small-pox per 10,000 of population.

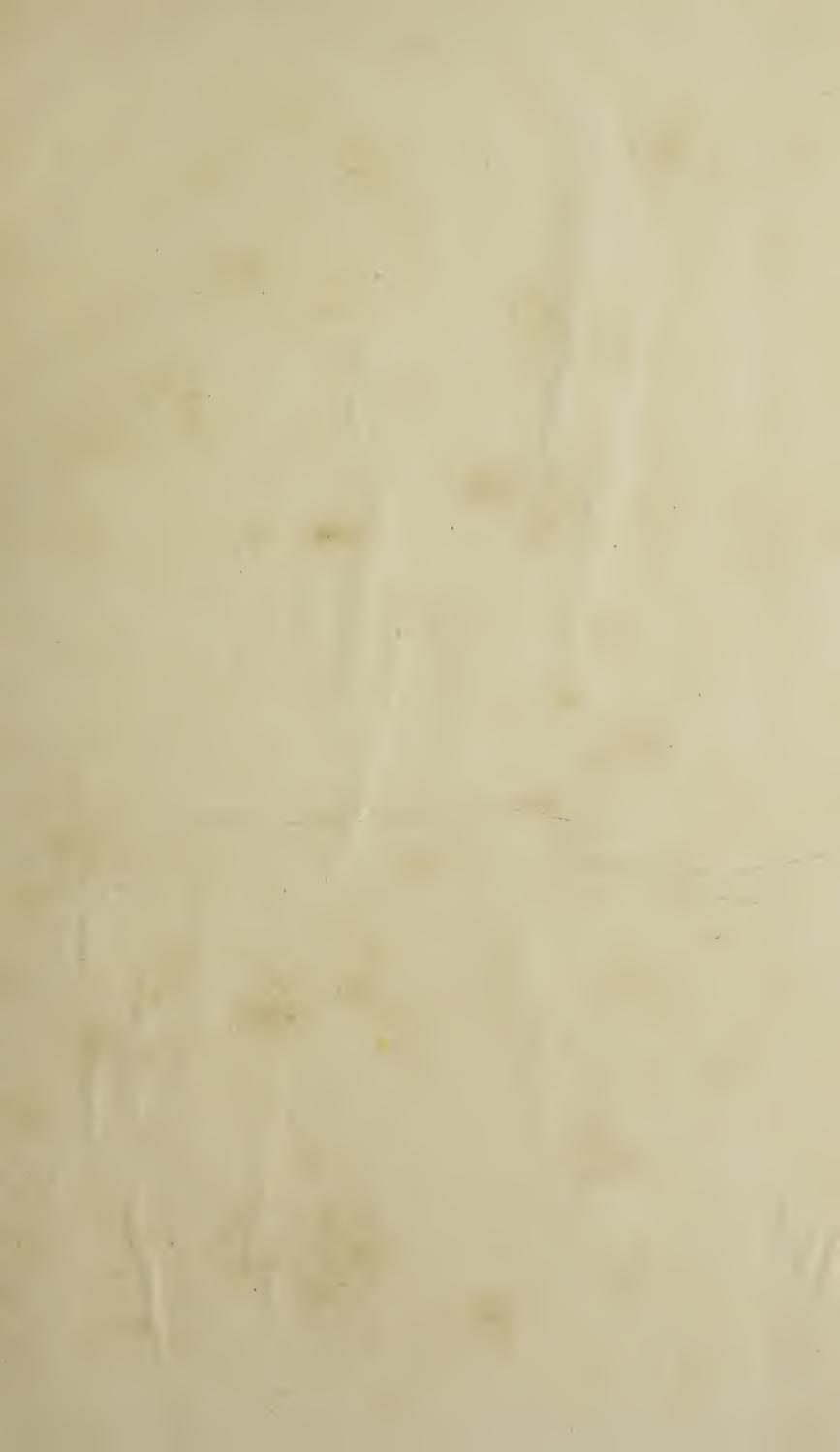
* Registration of vital statistics 's not carried out in these Districts.

Statistics of Pyapôn have been included in Ma-ubin.











ON

VACCINATION IN BURMA

FOR THE YEAR 1905-06.



RANGOON:

OFFICE OF THE SUPERINTENDENT, GOVERNMENT PRINTING, BURMA.

1906.